MODEL BUILDING
Importing the Model Building Libraries

Date	17November 2022
Team ID	PNT2022TMID33064
Project Name	Emerging Methods for Early Detection of ForestFires

##Importing The ImageDataGenerator Library

```
import keras
from keras.preprocessing.image import ImageDataGenerator
```

###Define the parameters/arguments for ImageDataGenerator class

```
train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,rotation_range=180,zoo
m_range=0.2,horizontal_flip=True)

test_datagen=ImageDataGenerator(rescale=1./255)
```

###Applying ImageDataGenerator Functionality to trainset

```
x_train=train_datagen.flow_from_directory(r'C:\archive\Dataset\Dataset\train_set',
target_size=(128,128),batch_size=32,class_mode='binary')
```

###Applying ImageDataGenerator Functionality to testset

```
x_test=test_datagen.flow_from_directory(r'C:\archive\Dataset\Dataset\test_set',tar
get_size=(128,128),batch_size=32,class_mode='binary')
```

##Import model building libraries

#To Define linear initialization import Sequential

from keras.models import Sequential

#To add layers import Dense

from keras.layers import Dense

#To create Convolution kernel import Convolution 2D

from keras.layers import Convolution2D

#import maxpooling layers

from keras.layers import MaxPooling2D

#import flatten Layer

from keras.layers import Flatten

import warnings

warnings.filterwarnings('ignore')